

REMARKS

Prior to this communication, claims 1 – 27 are pending in the application. In the pending Office action, claims 1 – 27 stand rejected. By this amendment, Applicants are amending claims 1, 2, 19, and 21, canceling claims 3, 10 – 18, 20, and 25, and adding claims 28 – 40; thus leaving claims 4 – 9, 22 – 24, 26, and 27 unchanged. Reexamination and reconsideration in view of the amendment and remarks contained herein are respectfully requested. The Applicants also note that an Electronic Information Disclosure Statement has also been filed.

Claims 1 – 6, 8, 19 – 25, and 27 stand rejected under 35 U.S.C § 102(b) as being anticipated by U.S. Patent No. 6,172,428 (“Jordan”). A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *M.P.E.P.* § 2131.

Amended claim 1 is repeated below for the Examiner’s reference.

1. A load monitoring apparatus for a generator, wherein the generator is adapted to supply power to a load, the apparatus comprising:
a sensor adapted to sense a signal supplied to the load; and
a humanly perceptible indicator having a plug adapted to be plugged into a power receptacle, and to output at least one discontinuous humanly perceptible indication of the sensed signal supplied to the load.

The Jordan reference does not teach or suggest, among other things, “a humanly perceptible indicator having a plug adapted to be plugged into a power receptacle, and to output at least one discontinuous humanly perceptible indication of the sensed signal supplied to the load.” Rather, the Jordan reference discloses a digital control system (“DCS”) for monitoring, acquiring data, and controlling a generator set. (Abstract of the Jordan reference.) The Jordan reference also states that digital signals are supplied to the DCS, and conditioned by a signal conditioning module. (Col. 9, lines 14, 24 – 25.) The conditioned digital signals are then “transmitted, preferably via Ethernet 106, to a Computer Interface Module (“CIM”) 108 and/or to one or more personal computers (“PCs”) 110.” (Col. 9, lines 28 – 31.) The Jordan reference further teaches that “CIM 108 and PCs 110 are computers which each may include a central processing unit (CPU), memory, a serial port, an input device, such as a keyboard and/or a mouse, and a display device, such as a computer monitor. CIM 108 is preferably integrated within the gen-set’s control panel.” (Col. 9, lines 35 – 39.) That is, the DCS, the CIM 108, and the control panel 300 are coupled to the generator set via an Ethernet rather than via a power receptacle.

Furthermore, the Examiner asserts that the control panel 300 or the switchboard as shown in FIG. 3 is the “humanly perceptible indicator.” (Section 2 of the pending action.) However, the control panel 300 or the switchboard as shown in FIG. 3 receives its signals from the generator set via an Ethernet port. (Col. 9, line 55.) Therefore, the control panel 300 or the switchboard as shown in FIG. 3 cannot be the “humanly perceptible indicator” as required by claim 1. Therefore, the Jordan reference does not teach or suggest each and every limitation of claim 1.

Before proceeding further, Applicants also note that the Jordan reference teaches away from claim 1 and teaches away from combining with other references to result in claim 1 since “CIM 108 is preferably integrated within the gen-set’s control panel.” (Col. 9, lines 35 – 40.) The Examiner further asserts that “the indicator and sensor are inherently an integral part of the generator” that also teaches away from combining the Jordan reference with other references to result in claim 1. (Section 2 of the Action.) That is, the CIM 108 and the control panel are considered as an integrated unit, and therefore a power receptacle of the generator into which the CIM 108 is plugged is not required. Therefore, the Jordan reference explicitly teaches away from having “humanly perceptible indicator having a plug adapted to be plugged into a power receptacle, and to output at least one discontinuous humanly perceptible indication of the sensed signal supplied to the load.” Accordingly, independent claim 1 is allowable.

Claims 2 – 6, and 8 are dependent from claim 1. Accordingly, claims 2 – 6, and 8 include patentable subject matter for the reasons set forth above with respect to claim 1.

Applicants also note the complexity of the graphical display on the CIM 108 of the control panel 300 as shown in FIGS. 4 and 5 and disclosed in the Jordan reference. For example, when an operator wants to display critical measurement such as output power, the operator will have to switch from the FULL DISPLAY MODE (FIG. 4 of the Jordan reference) to the MAIN DISPLAY MODE (FIG. 5 of the Jordan reference) by selecting or depressing one or more of the switches 316, 317, 318, 319, and 320. (Col. 16, lines 16 – 20.) With the number of switches, buttons, and displays disclosed in FIG. 3, a typical operator will have to determine which switch or button or the sequence in which the switch or the button has to be selected. This can be time consuming for the operator to learn and use. Furthermore, the complexity of the display, the type of connections, the software required to operate the CIM 108, and the computers needed to connect to the panel 300, the system disclosed in the Jordan reference can be an expensive and a complicated system.

Claims 19 – 25, and 27 also stand rejected under 35 U.S.C § 102(b) as being anticipated by the Jordan reference. Amended claim 19 is repeated below for the Examiner’s reference.

19. A method of monitoring power supplied from a generator to a load with a humanly perceptible indicator, the method comprising: plugging the humanly perceptible indicator into a power receptacle;

sensing the power supplied from the generator to the load; and outputting at the humanly perceptible indicator at least one discontinuous humanly perceptible indication of the sensed power supplied to the load at the humanly perceptible indicator

Amended claim 19 requires, among other things, “plugging the humanly perceptible indicator into a power receptacle.” For the same reasons set forth above with respect to claim 1, independent claim 19 is also allowable. Dependent claims 20 – 27 are dependent from claim 19, and therefore are also patentable.

Claims 7 and 26 stand rejected under U.S.C. 103(a) as being unpatentable over the Jordan reference and in view of skill in the art. The Examiner asserted that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a signal sensor to sense a frequency higher than 56.5 or 58.5 Hz, to control the rotating speed of generator, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d.

To establish a *prima facie* case of obviousness, three basic criteria must be met. *M.P.E.P.* § 706.02(j), and 2143.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the reference teachings.

Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be both found in the prior art, not in applicant’s disclosure.

Id. See also *In re Rougget*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) (“To reject claims in an application under section 103, the Examiner must show an unrebutted *prima facie* case of obviousness. In the absence of a proper *prima facie* case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent.”)

Applicants contend that the Examiner has not set forth a proper *prima facie* case of obviousness in section 4 of the pending action. For example, the Examiner must show that the prior art reference (or references when combined) teaches or suggests all the claim limitations. Firstly, amended claim 1 requires, among other things, “a humanly perceptible indicator having a plug adapted to be plugged into a power receptacle, and to output at least one discontinuous humanly perceptible indication of the sensed signal supplied to the load.” The Jordan reference does not teach or suggest the humanly perceptible indicator having a plug adapted to be plugged into a power receptacle. Secondly, amended claim 19 requires, among other things, “plugging the humanly perceptible indicator into a power receptacle.” Again, the Jordan reference does not teach or suggest “plugging the humanly perceptible indicator into a power receptacle.” Claim 10 has been cancelled.

Since the Jordan reference does not teach or suggest all the limitations of the subject matters of independent claims 1, and 19, the Jordan reference (or references when combined) does not teach or suggest all the limitations as claimed. As a result, the Examiner has not set forth a proper *prima facie* case of obviousness. Accordingly, the dependent claims 7 and 26, that are dependent from the independent claims 1 and 19, respectively, contain subject matters that are patentable, and therefore, allowable.

Claims 9 – 13, and 15 – 18 stand rejected under U.S.C. 103(a) as being unpatentable over the Jordan reference and in view of U.S. Patent No. 6,084,313 (“Frank”). Specifically, the Examiner asserts that the Jordan reference “teaches all limitation of claim 10 except for a socket type plug to be coupled to the generator.” (Section 4 of the pending Action.) The Examiner also asserts that the Frank reference discloses “a generator set with control panel having a socket type plug to be coupled to generator (32c) for [the] purpose of connecting output power.” (Section 4 of the pending Action.) The Examiner hence asserts that it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the generator disclosed in the Jordan reference with a socket type plug to be coupled to the generator disclosed by the Frank reference for the purpose of connecting output power. Claims 13, 15 – 18 have been cancelled.

With respect to claim 9, *The Authoritative Dictionary of IEEE Standards Terms, 7th Edition*, page 783, defines the term “plug” as “a device, usually associated with a cord, that by insertion in a jack or receptacle establishes connection between a conductor or conductors associated with the plug and a conductor or conductors connected to the jack or receptacle.” Applicants, therefore, contend that the Frank reference does not disclose any plug as defined above. Rather, the Frank reference discloses a panel 30a that includes a plurality of electrical

jacks or outlets into which a plug can inserted. Specifically, the Frank reference discloses that the panel 30a “carries a plurality of AC plugs, energy output ports, 32a into which electrical plugs can be inserted for purposes of receiving energy from system 10.” (Col. 5, lines 44 – 46.) In other words, even if the control panel of the Jordan reference is combined with the output ports for the purpose of connecting output power as disclosed by the Frank reference, the combination of the Jordan reference and the Frank reference will not work as claimed in claim 9 because the control panel or the CIM 108 of the Jordan reference does not contain a plug as defined by *The Authoritative Dictionary of IEEE Standards Terms*, and the output ports 32a do not connect any output power to the control panel or the CIM 108 of the Jordan reference. Therefore, Applicants contend the Examiner has not set forth a proper *prima facie* case of obviousness in section 4 of the pending action. Therefore, claim 9 is allowable.

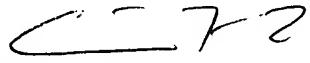
Claims 28 – 40 have been added and include additional patentable subject matter which may be allowable for one or more of the reasons set forth above with respect to claims 1 and 19, and/or for additional reasons not discussed herein. Particularly, claim 28 is dependent from claim 1. Accordingly, claim 28 includes patentable subject matter for the reasons set forth above with respect to claim 1. Claim 29 is directed to a load monitoring apparatus for a generator. The load monitoring apparatus requires, among other things, a plurality of discrete light sources. Each of the discrete light sources indicates a load applied to the generator. Claims 30 – 34 are dependent from claim 29. Claim 35 is directed to a load monitoring apparatus for a generator. The load monitoring apparatus requires, among other things, a numeric display. The numeric display displays a numerical value that represents a percentage of the load applied to the generator. Claims 36 – 40 are dependent from claim 35.

No new matter has been added.

CONCLUSION

Entry of the Amendment and allowance of claims 1 – 9, 18 - 40 are respectfully requested. The undersigned is available for telephone consultation at any time during normal business hours.

Respectfully submitted,



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